Kenichiro Kobayashi et al.

Appln. No.

10/737,336

Page

7

REMARKS

Claims 1-17 are pending in the present application. Reconsideration is respectfully requested for the following reasons.

Claims 1-4, 7-11 and 13 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Japanese Publication No. 07-110216 ("the Japanese '216 publication") in view of U.S. Patent No. 3,739,697 to Miyagawa. The requirements for making a *prima facie* case of obviousness are described in MPEP §2143 as follows:

In order to establish a *prima facie* case of obviousness, three criteria must be met. M.P.E.P. § 706.02(j). Firstly, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. *In re Fine*, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Secondly, there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Thirdly, the prior art reference (or references) must teach or suggest all the claim limitations. *In re Royka*, 180 U.S.P.Q. 580 (C.C.P.A. 1974).

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

MPEP §2143.01 provides further guidance as to what is necessary in showing that there was motivation known in the prior art to modify a reference teaching. Specifically, MPEP §2143.01 states:

The mere fact that references <u>can</u> be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

In proceedings before the Patent and Trademark Office, the Examiner bears the burden of establishing a *prima facie* case of obviousness based upon the prior art. *In re Fritch*, 23 USPQ 2d 1780, 1783 (Fed. Cir. 1992); M.P.E.P. §2142. Applicants respectfully assert that the Examiner has not yet met the Examiner's burden of establishing a *prima facie* case of obviousness with respect to the rejected claims. Consequently, the Examiner's rejection of the subject claims is inappropriate, and should be withdrawn.

Kenichiro Kobayashi et al.

Appln. No.

10/737,336

Page

8

In regard to the first criterion of obviousness, there is no suggestion or motivation. either in the references themselves or to the knowledge generally available to one of ordinary skill in the art, to combine the reference teachings. The Japanese '216 publication discloses a method and instrument for measuring vertical and lateral movement of a speckle pattern utilizing laser light. According to the Japanese '216 publication, a laser oscillator 4 is used to radiate a measured object 1, thereby creating a speckle pattern 3. The speckle pattern 3 is then measured using a CCD camera 5. The Miyagawa '697 patent is drawn to a device for placing dates on film in a typical commercial camera. A camera body 12 of the camera includes a light shielding tube 17 located between lenses and film 24. The light shielding tube 17 is positioned to prevent light from entering through a side of the area between the lenses and the film 24 to prevent undesirable exposure of the film 24. However, since the Japanese '216 publication does not disclose any camera having film that could be undesirably exposed without the addition of any light shielding tube as disclosed in the Miyagawa '697 patent, there is no suggestion or motivation for adding any light shield from the Miyagawa '697 patent to any item of the Japanese '216 publication. Accordingly, claims 1-4, 7-11 and 13 are in condition for allowance.

In regard to the third criterion of obviousness, even if there was a suggestion or motivation for combining the Japanese '216 publication and the Miyagawa '697 patent, any resulting combination would not include all of the claimed features.

Claim 1 defines a method for direct image pick-up of a particular granular speck pattern generated by reflecting light of a laser beam depending on a degree of roughness of the surface of an object to be inspected including, among other things, irradiating said object to be inspected with the laser beam; directly picking up said granular speck pattern in a relatively well lighted environment using a lensless video camera having a CCD (Charge Coupled Device) element incorporated in said video camera; and providing a shielding tube coupled to said camera to shield extraneous light rays.

The prior art of record does not disclose or suggest the above noted features of claim 1. Specifically, neither of the references cited to reject the claims include a lensless video camera or directly picking up a granular speck pattern in a relatively well lighted environment. Accordingly, claim 1 is in condition for allowance. Furthermore, claim 8 depends from claim

Applicant : Kenichiro Kobayashi et al.

Appln. No. : 10/737,336

Page : 9

1, and since claim 1 defines unobvious patentable subject matter as discussed above, claim 8 defines patentable subject matter. Accordingly, claim 8 is in condition for allowance.

Claim 2 defines an apparatus for direct image pick-up of a particular granular speck pattern generated by reflecting light of a laser beam depending on a degree of roughness of the laser beam irradiated surface of an object to be inspected including, among other things, a lensless video camera having a CCD element incorporated in said video camera; and a shielding tube coupled to said camera for shielding extraneous light rays.

The prior art of record does not disclose or suggest the above noted features of claim 2. Specifically, the prior art cited by the Examiner does not include a lensless video camera. Accordingly, claim 2 is in condition for allowance. Furthermore, claim 9 depends from claim 2, and since claim 2 defines unobvious patentable subject matter, claim 9 defines patentable subject matter. Accordingly, claims 2 and 9 are in condition for allowance.

Claim 3 defines a method for direct image pick-up of a particular granular speck pattern generated by the transmitted light of a laser beam diffusively reflecting depending on a degree of roughness of the laser beam irradiated onto the surface of an object to be inspected or shapes of fine ingredients constituting said object to be inspected including, among other things, irradiating said object to be inspected with the laser beam; directly picking up said granular speck pattern in a relatively well lighted environment using a lensless video camera having a CCD element incorporated in said video camera; and a shielding tube coupled to said camera to shield extraneous light rays.

The prior art of record does not disclose or suggest the above noted features of claim 3. Specifically, the prior art cited by the Examiner does not include a lensless video camera or directly picking up a granular speck pattern in a relatively well lighted environment. Accordingly, claim 3 is in condition allowance. Furthermore, claim 11 depends from claim 3, and since claim 3 defines unobvious patentable subject matter, claim 11 defines patentable subject matter. Accordingly, claims 3 and 11 are in condition for allowance.

Claim 4 defines an apparatus for direct image pick-up of a particular granular speck pattern generated by transmitted light of a laser beam diffusively reflecting depending on a degree of roughness of the laser beam irradiated surface of an object to be inspected or on shapes of fine ingredients constituting said object to be inspected including, among other

Kenichiro Kobayashi et al.

Appln. No.

10/737,336

Page

10

things, a commercially available video camera having a CCD image detector and deprived of its image forming lens; and a shielding tube coupled to said camera to shield extraneous light rays from striking the CCD of said camera.

The prior art of record does not disclose or suggest the above noted features of claim 4. Specifically, the prior art cited by the Examiner does not include a video camera having a CCD image detector and deprived of its image forming lens. Accordingly, claim 4 is in condition for allowance. Furthermore, claim 10 depends from claim 4, and since claim 4 defines unobvious patentable subject matter as discussed above, claim 10 defines patentable subject matter. Accordingly, claims 4 and 10 are in condition for allowance.

Claim 7 defines an apparatus for direct image pick-up of a particular granular speck pattern generated by transmitted light of a laser beam diffusively reflecting depending on a degree of roughness of the laser beam irradiated surface of an object to be inspected or on shapes of fine ingredients constituting said object to be inspected including, among other things, a lensless video camera having a CCD image detector for receiving light directly onto said CCD; and a shielding tube coupled to said camera to shield extraneous light rays from striking the CCD of said camera.

The prior art of record does not disclose or suggest the above noted features of claim 7. Specifically, the cited prior art does not include a lensless video camera. Accordingly, claim 7 is in condition for allowance. Furthermore, claim 13 depends from claim 7, and since claim 7 defines unobvious patentable subject matter as discussed above, claim 13 defines patentable subject matter.

Claims 5, 6 and 12 have been rejected under 35 U.S.C. §103(a) as being unpatentable over the Japanese '216 publication in view of the Miyagawa '697 patent and a digital camera. The standard for making an obviousness rejection of claims is discussed above.

In regard to the first criterion of obviousness, there is no suggestion or motivation, either in the references themselves or to the knowledge of one generally skilled in the art, to combine the reference teachings. As discussed above, there is no suggestion or motivation for combining the Japanese '216 publication with the Miyagawa '697 patent. Accordingly, claims 5, 6 and 12 are in condition for allowance.

Kenichiro Kobayashi et al.

Appln. No.

10/737,336

Page

11

In regard to the third criterion of obviousness, the prior art of record does not disclose or suggest all of the claimed features. Claim 6 defines a method for direct image pick-up of a particular granular speck pattern generated by the transmitted light of a laser beam diffusively reflecting depending on a degree of roughness of the laser beam irradiated onto the surface of an object to be inspected or shapes of fine ingredients constituting said object to be inspected including, among other things, irradiating said object to be inspected with a laser beam; directly picking up said granular speck pattern in a relatively well lighted environment using a lensless digital camera having a CCD element incorporated in said camera; and a shielding tube coupled to said camera to shield extraneous light rays.

The prior art of record does not disclose or suggest the above noted features of claim 6. Specifically, the cited prior art does not include a lensless digital camera or directly picking up a granular speck pattern in a relatively well lighted environment. Accordingly, claim 6 is in condition for allowance.

New claims 14-17 are believed to define patentable subject matter.

All pending claims 1-17 are believed to be in condition for allowance, and a Notice of Allowability is therefore earnestly solicited.

Respectfully submitted,

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